Panel: **Aeromedical Lessons Learned from the Space Shuttle Columbia Accident Investigation – Update 2011**

Draft Abstract

Title: NASA Medical Response to Human Spacecraft Accidents

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Introduction: Manned space flight is risky business. Accidents have occurred and may occur in the future. NASA's manned space flight programs, with all their successes, have had three fatal accidents, one at the launch pad and two in flight. The Apollo fire and the Challenger and Columbia accidents resulted in a loss of seventeen crewmembers. Russia's manned space flight programs have had three fatal accidents, one ground-based and two in flight. These accidents resulted in the loss of five crewmembers. Additionally, manned spacecraft have encountered numerous close calls with potential for disaster. The NASA Johnson Space Center Flight Safety Office has documented more than 70 spacecraft incidents, many of which could have become serious accidents.

At the Johnson Space Center (JSC), medical contingency personnel are assigned to a Mishap Investigation Team. The team deploys to the accident site to gather and preserve evidence for the Accident Investigation Board. The JSC Medical Operations Branch has developed a flight surgeon accident response training class to capture the lessons learned from the Columbia accident. This presentation will address the NASA Mishap Investigation Team's medical objectives, planned response, and potential issues that could arise subsequent to a manned spacecraft accident.

Educational Objectives: Understand the medical objectives and issues confronting the Mishap Investigation Team medical personnel subsequent to a human space flight accident.